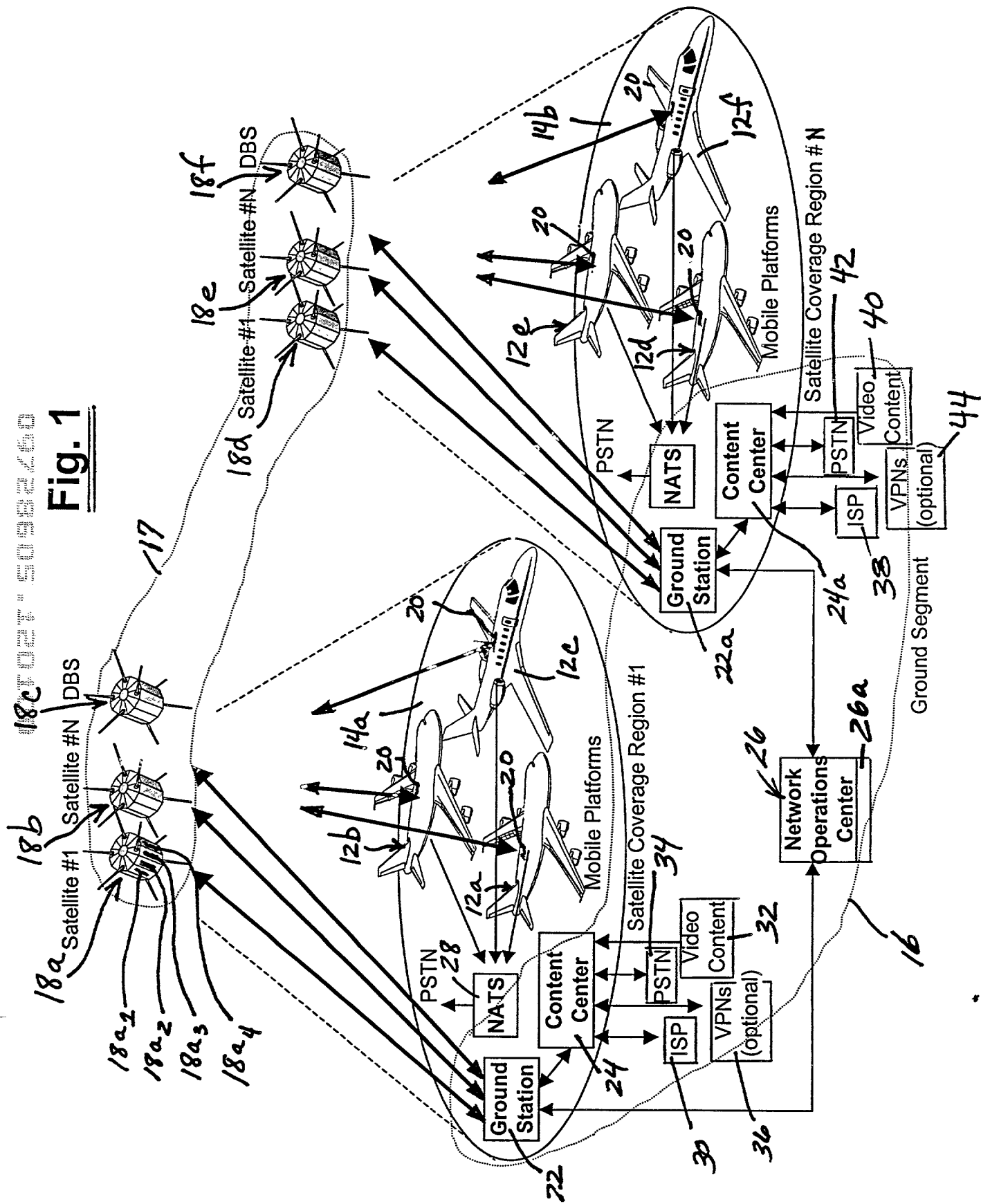
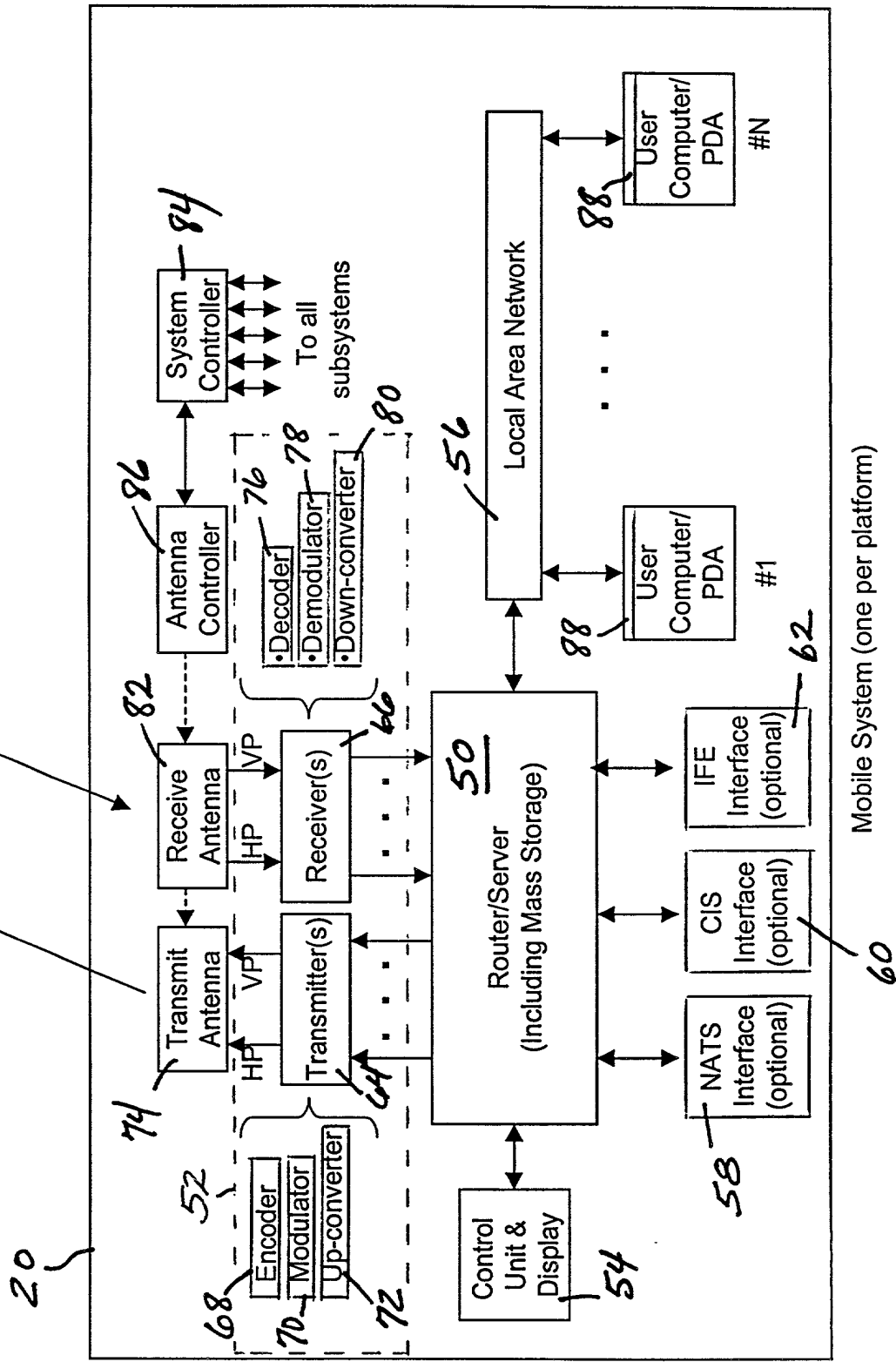


FIG. 1



To Satellites  
From Satellites



**Fig. 2 Mobile System**

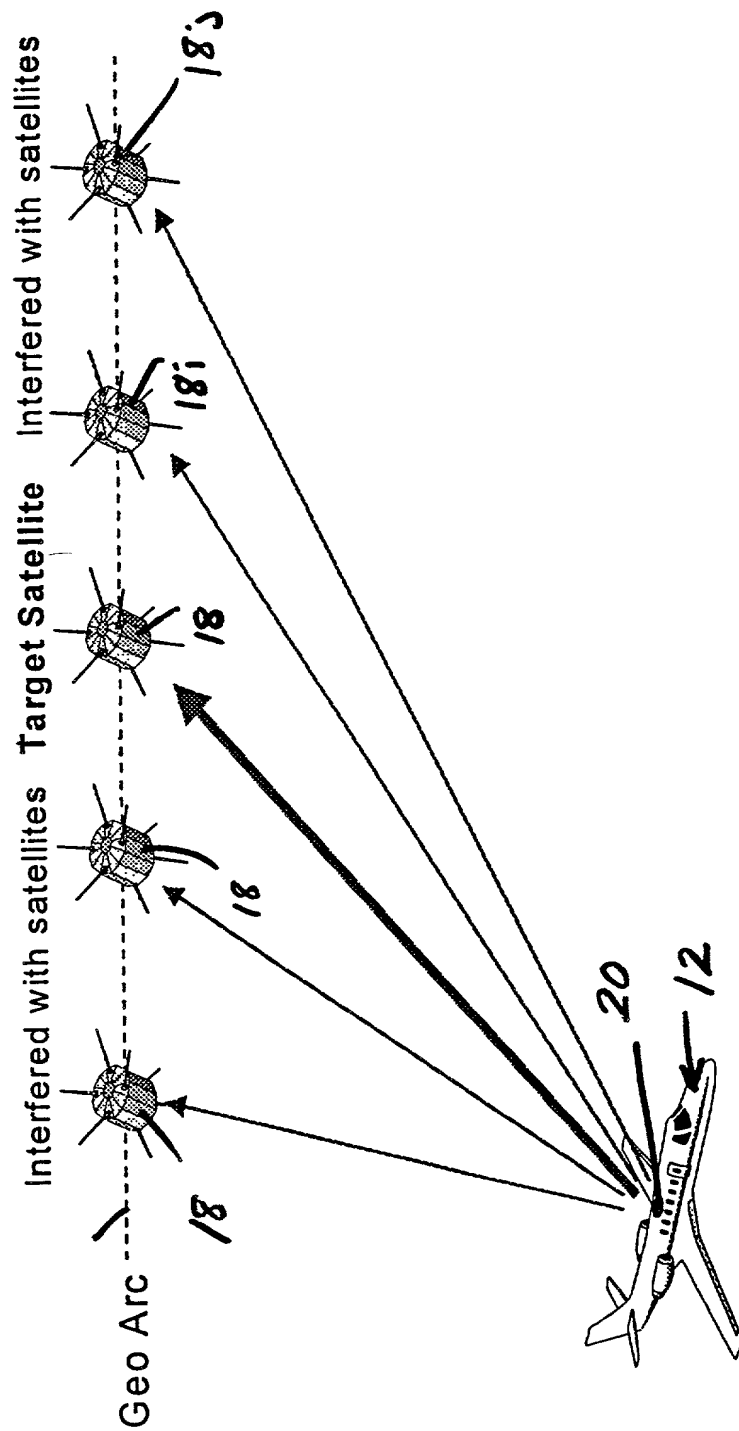


Figure 3

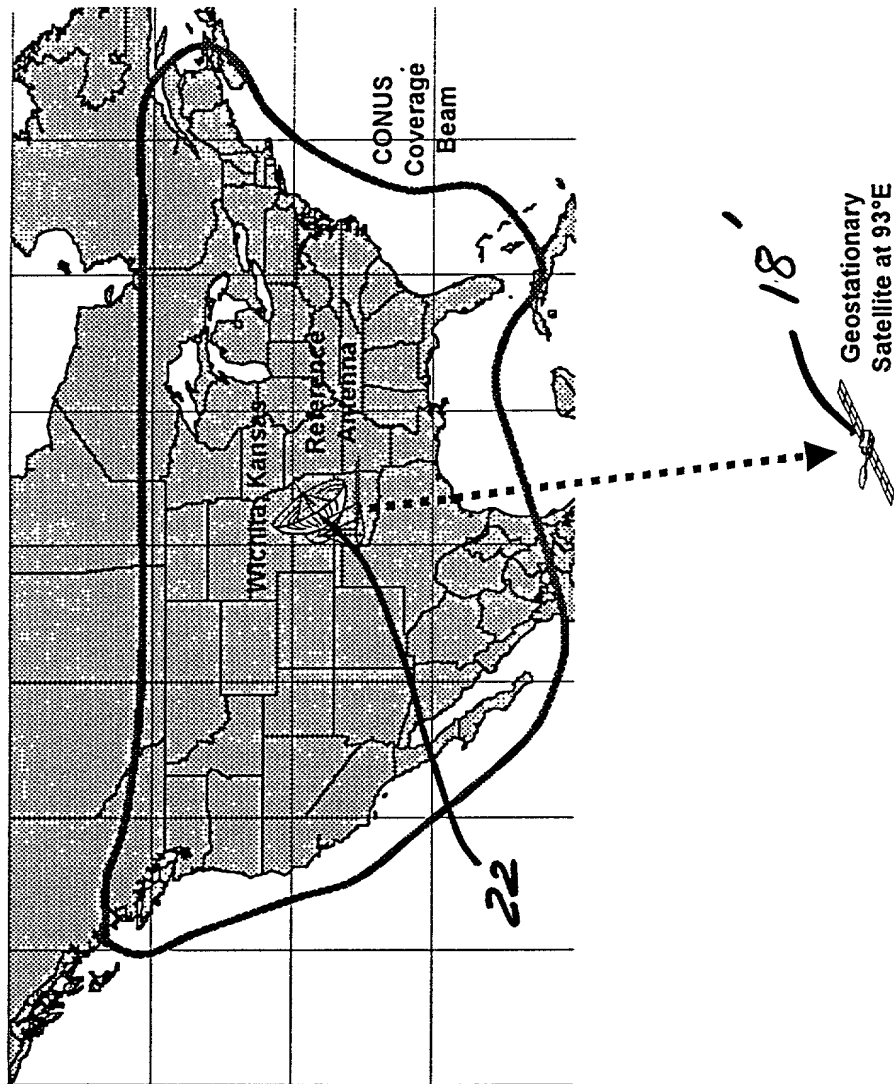


FIGURE 4

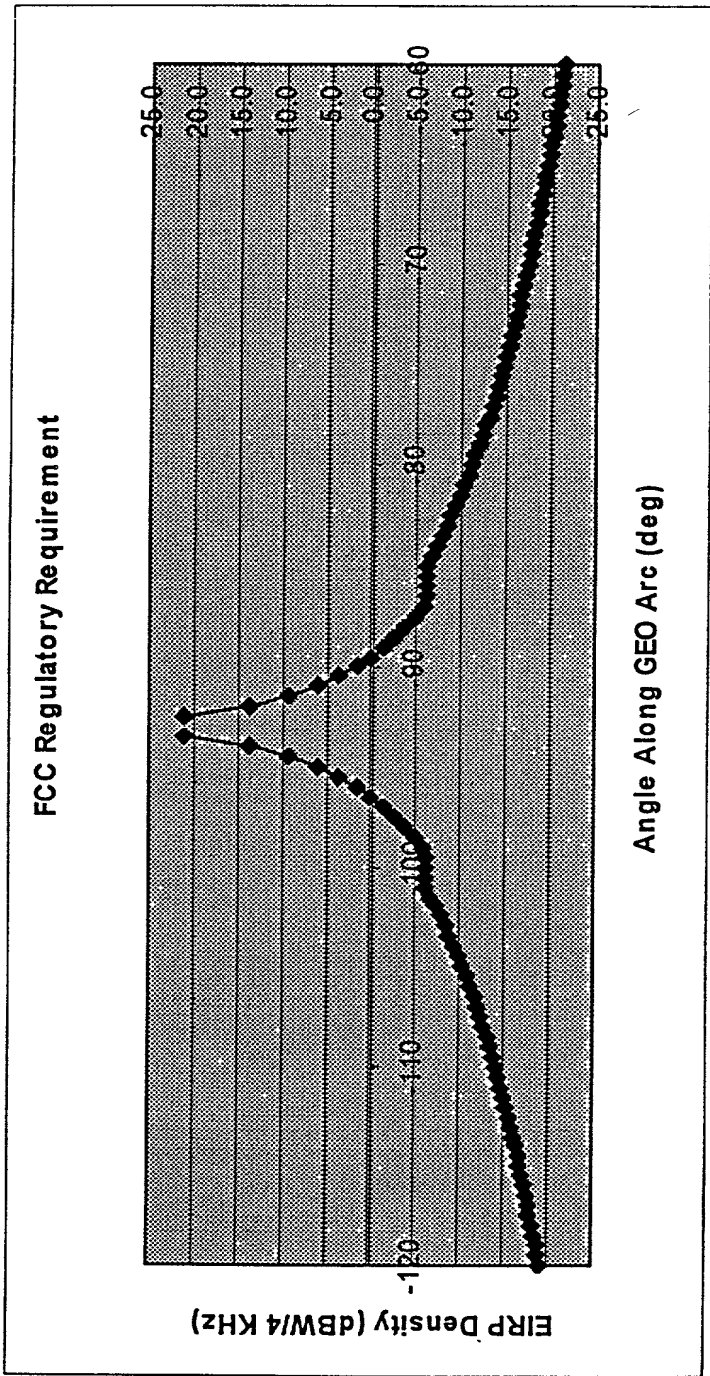


Figure 5

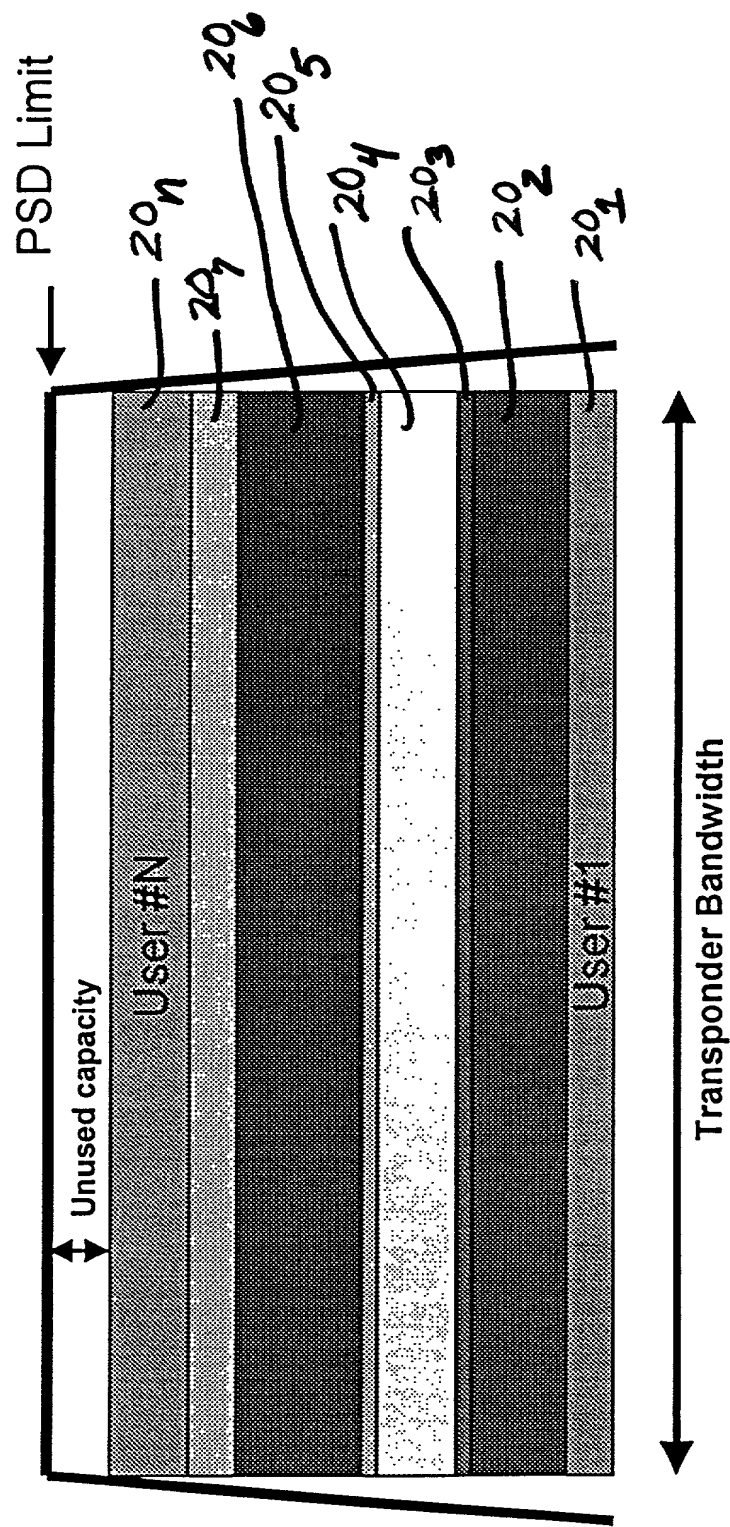


FIGURE 6

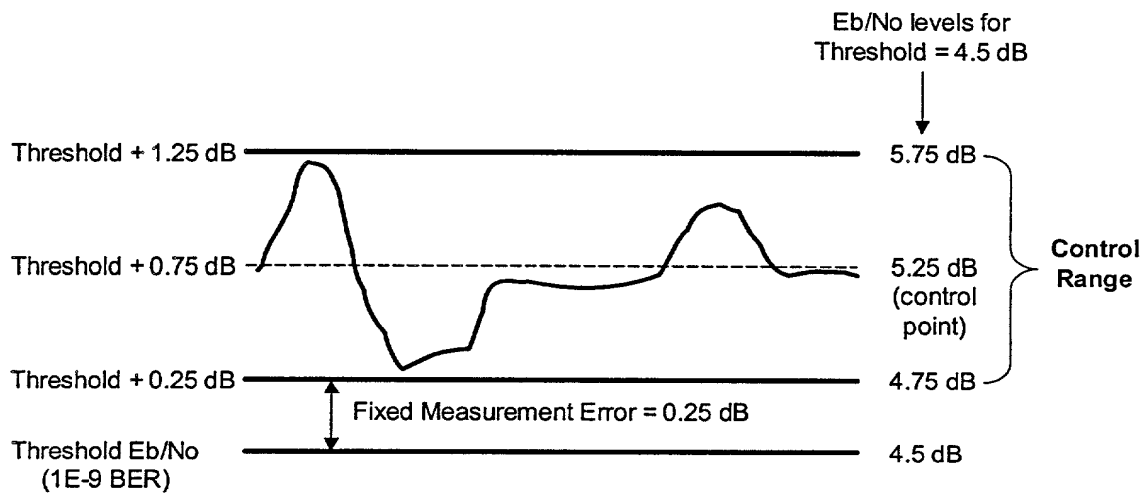
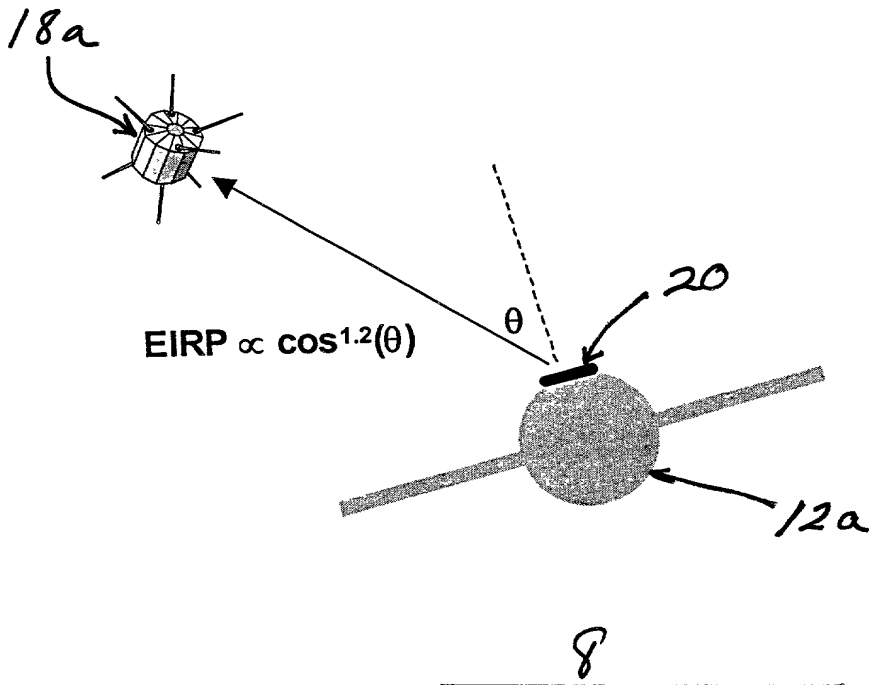


FIGURE 7



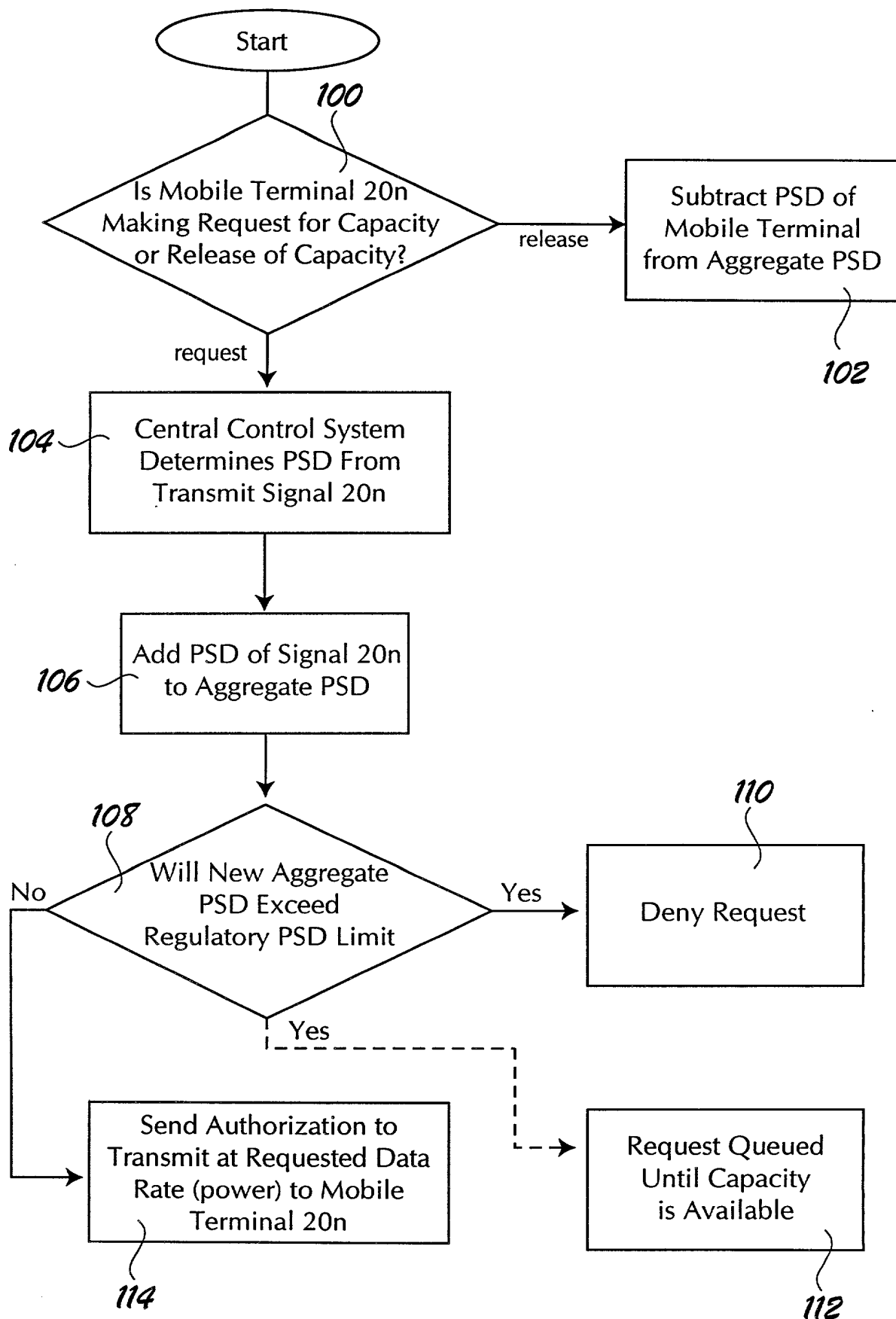


FIG. 9



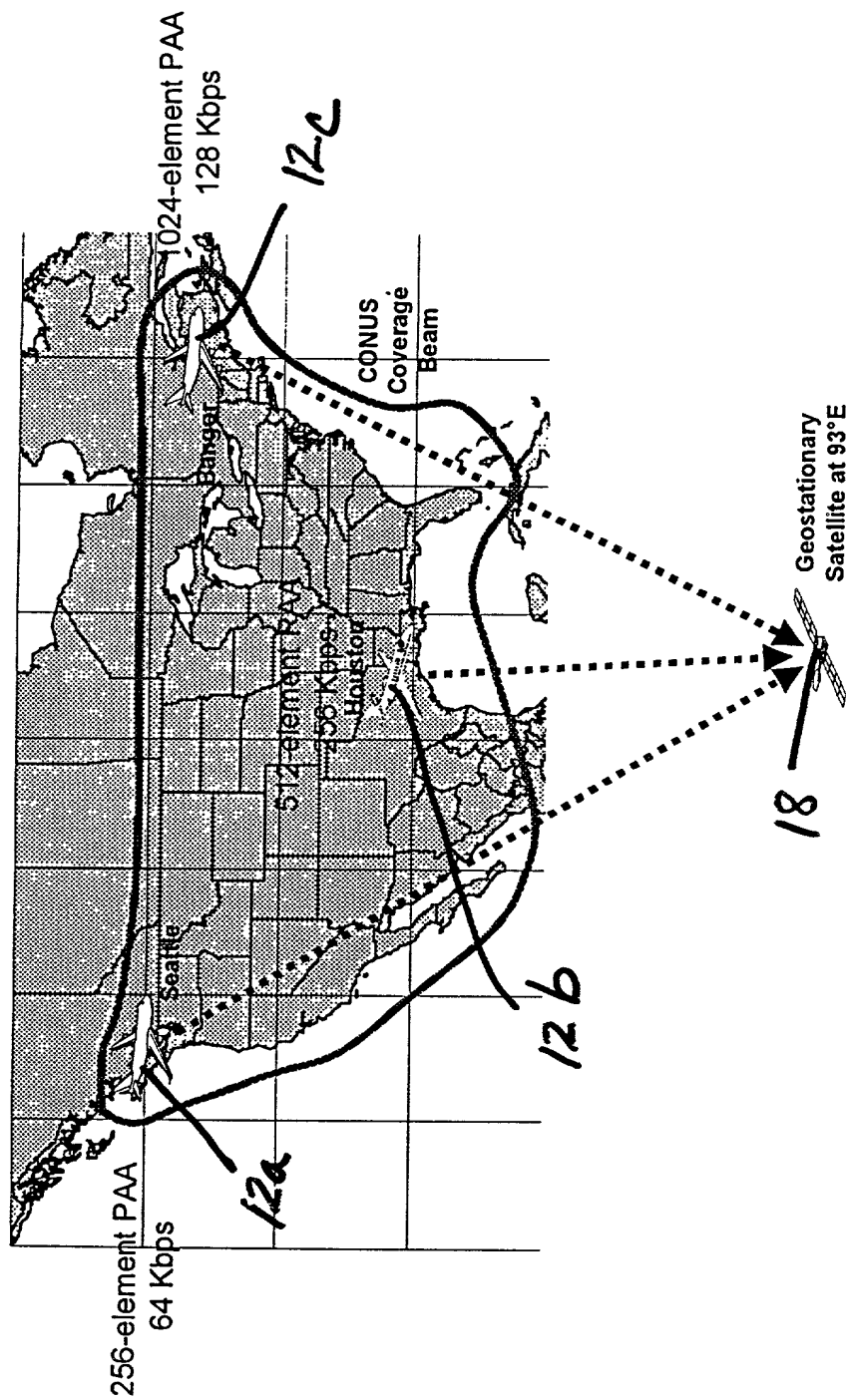


FIGURE 10

256 element  
Phased Array Antenna,  
34 dBW, 64 Kbps, Seattle

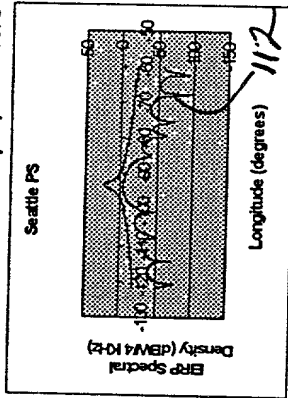


FIGURE 11

FIGURE 12

512 element  
Phased Array Antenna,  
39 dBW, 256 Kbps, Houston

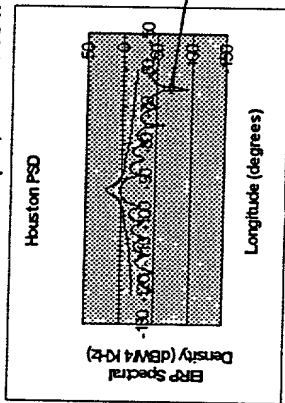


FIGURE 13

1024 element  
Phased Array Antenna,  
37 dBW, 128 Kbps, Bangor

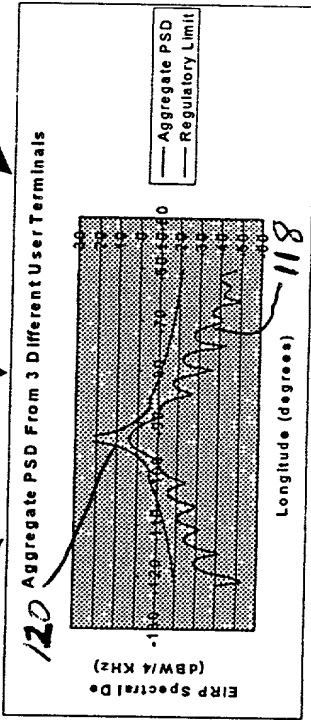
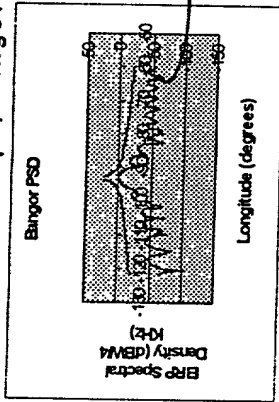


FIGURE 14